38° and to 8°. The severest cold wave of the month occurred in front of No. I high in the January MONTHLY WEATHER REVIEW. A fall of 52° was reported at Rapid City evening of 29th, and minimum temperatures of —24° and —22° occurred at Duluth and Moorhead, respectively, a. m. of 31st.

Lows.—Six of the lows made their first appearance to the north of Montana; No. V was first noted off the south Pacific coast, No. VII in the south Rocky Mountain region, and No. II in the west Gulf. The general tendency of all the storms was eastward or north of east, and all but V and VII could be followed to Newfoundland. No. VII merged with VI over Lake Huron, and V was last noted off Cape Cod. The highest winds of the month were reported as follows: Evening of 4th, as storm No. II approached the middle Atlantic coast, Cape May reported an east wind of 67 miles an hour and New York City an east wind of 60 miles. On morning of 5th New York City reported an east wind of 76 miles and Block Island a southwest wind of 69 miles. On evening of 5th Eastport reported an east wind of 72 miles. On a. m. of 11th Buffalo reported a west wind of 60 miles while storm No. III was hovering near the Gulf of St. Lawrence.—*Prof. H. A. Hazen.*

Movements of centers of areas of high and low pressure.

Number.	First observed.			Last observed.			Path.		Average velocities.	
	Date.	Lat. N.	Long. W.	Date.	Lat. N.	Long W.	Length.	Duration.	Daily.	Hourly.
High areas.		°	°		°	°	*Miles.*	*Days.*	*Miles.*	*Miles.*
I	*30, p. m.	39	96	4, a. m.	49	64	2,370	3.5	677	28.2
II	1, p. m.	39	125	6, p. m.	29	83	3,270	5.0	654	27.2
III	5, a. m.	47	120	11, p. m.	30	90	2,880	6.5	443	18.5
IV	11, p. m.	45	112	18, p. m.	31	80	3,660	7.0	523	21.8
V	18, a. m.	50	86	21, a. m.	48	63	1,380	3.0	460	19.2
VI	24, a. m.	51	90	26, p. m.	46	59	1,530	2.5	612	25.5
VII	26, p. m.	54	107	29, p. m.	32	79	2,250	3.0	750	31.2
Total							17,340	30.5	4,119	171.6
Mean of 7 paths							2,477		588	24 5
Mean of 47.5 days									569	23.7
Low areas.										
I	*29, a. m.	49	124	2, p. m.	38	97	1,740	3.5	497	20.7
II	1, a. m.	27	94	6, p. m.	48	53	3,240	5.5	589	24.5
III	4, a. m.	52	114	8, p. m.	47	52	2,850	4.5	633	26.4
IV	16, a. m.	54	117	19, a. m.	49	53	2,820	3.0	940	39.2
V	16, a. m.	32	119	20, p. m.	41	69	3,210	4.5	713	29.7
VI	19, a. m.	53	118	24, a. m.	49	51	3,240	5.0	648	27.0
VII	20, p. m.	37	107	22, p. m.	46	84	1,590	2.0	795	33.1
VIII	24, p. m.	54	111	29, a. m.	47	54	2,700	4.5	600	25.0
IX	26, p. m.	55	120	31, a. m.	47	52	3,210	4.5	713	29.7
Total							24,600	37.0	6,128	255.3
Mean of 9 paths							2,733		681	28.4
Mean of 47.5 days									665	27.7

*November.

RIVERS AND FLOODS.

The crest of the rise which was moving down the lower Mississippi at the close of November reached New Orleans on the 2d of December with a maximum stage, however, of but 6.2 feet, which was the highest for the month. Above there was a general fall in the Mississippi and Ohio and their tributaries which continued in the Mississippi and Missouri until the 16th, when, owing to a moderate thaw, a rise began in the lower Missouri and middle Mississippi, the advance reaching St. Louis on the same day. A similar cause inaugurated a slow rise in the Ohio, commencing at Pittsburg on the 17th. Heavy rains on the 18th and 19th over the Mississippi and Ohio valleys accentuated matters, and a pronounced rise set in over both rivers. The rise in the Mississippi and Missouri was of limited extent, the crest reaching St. Louis on the 26th when the gauge read 9.8 feet, a rise of 9.3 feet in eleven days. The wave in the Ohio continued to increase at Pittsburg until the crest of 15.2 feet was reached on the 22d, a rise of 13 feet in five days, 7 feet of which occurred during the twenty-four hours ending at 8 a. m. of the 21st. The crest continued down the river, reaching Wheeling on the 23d, Parkersburg on the 24th, Cincinnati on the 27th, with a total rise at the latter place of 21.6 feet in nine days to 31.9 feet, Louisville on the 28th, Evansville on the 30th, and Cairo on January 1, 1899, the increase from the Mississippi also reaching there on the 27th and 28th. In the lower Mississippi the rise began at Memphis on the 22d, Vicksburg on the 26th, New Orleans on the 28th, and continued at the end of the month. The rises in the tributaries occurred as a rule between the 19th and 25th.

No flood stages occurred, and a slow fall was in progress at the close of the month north and east of Cairo, except at Pittsburg. The tributaries were also falling generally, except those of the extreme upper Ohio.

In the Atlantic and Southern States and on the Pacific coast matters regarding river stages were uneventful and nothing of importance was recorded.

With the progress of the winter season there was a rapid advance of the ice line to lower latitudes. During November the southernmost limit reached by floating ice was about the mouth of the Missouri River, and the lowest limits of total freezing were Omaha on the Missouri and Leclaire, Iowa, on the Mississippi. Conditions on the upper Missouri remained practically unchanged during the month, but south of Omaha there was a considerable increase in the amount of ice, although there were no gorges of consequence. The river closed for a short time on the 9th about 2 miles above Kansas City, and ice 9 or 10 inches thick was harvested on the same day. At Boonville, Mo., there was floating ice constantly after the 5th, and on the 15th there was a gorge extending from a short distance below Boonville to Hermann, Mo., the ice remaining solid at the latter place uutil the 18th. Navigation was suspended on the 8th, and had not been resumed at the close of the month, heavy floating ice still continuing. From Omaha northward there remained solid ice, varying from 10 inches in thickness at that city to 20 inches at Bismarck, and there were also 24 inches at Moorhead on the Red River.

On the Mississippi the ice became solid at Davenport on the 7th and at Keokuk on the night of the 8th, while the Des Moines River at Des Moines froze over on the 9th.

Floating ice was generally present north of the mouth of the Missouri River, and at Hannibal there was a gorge above the Wabash bridge which lasted from the 4th until the evening of the 28th. At St. Louis there was floating ice on the 5th and 12th, at Chester on the 6th and 13th, and a small quantity at Cairo on the 8th and 9th. At the close of the month the ice ranged in thickness from 14 inches at Keokuk to 22 inches at St. Paul.

The Illinois River at Beardstown, Ill., closed on the 8th.

The Ohio was full of slush ice at Pittsburg on the 7th and also on the 10th and 11th. On the 15th navigation was necessarily closed. On the 20th the thaw resulted in a quantity of slush ice in the Allegheny, which lasted until the 31st. At Parkersburg there was heavy ice in both rivers from the 10th to the 12th, and the Ohio was frozen over from the 13th to the 18th. Navigation was resumed on the 19th and continued, although the river was not free from ice until the 25th. At Portsmouth, Ohio, navigation was suspended from the 11th to the 20th on account of running ice. At Cincinnati running ice, beginning on the 9th, caused a temporary suspension of navigation on the 10th. On the 14th the river was full of ice, and navigation was again suspended, but the thaw of the 19th permitted its resumption, and on the 21st the river was practically free from ice. At Louisville navi-

gation was impeded on the 14th and suspended on the following day, but was resumed on the 18th. At Evansville there was floating ice on the 14th, and navigation was suspended on the 15th, some boats being moved to the winter harbor in Green River through fear of a gorge, but by the 18th there was little or no ice, and navigation was fully resumed. At Cairo there was some ice from the 14th to the 18th, but by the 23d there was none in either river, the southern ice limit for the month being practically established here.

The Susquehanna was frozen over at Wilkesbarre, Pa., from the 12th until the 23d. At Harrisburg there was slush ice on the 8th, which gradually increased in quantity until the 15th. It was also present in greater or less quantities after the 18th. In the West Branch there was slush ice at Williamsport, Pa., on the 8th, freezing solid on the 9th, and remaining so until 2 p. m. of the 23d, after which time running ice was constant, continuing at the close of the month.

There was a gorge in the Potomac on the 22d about 25 miles east of Cumberland, Md., which at one time threatened great destruction to dams and property close to the river, but it moved out without causing serious damage.

On the Pacific coast large quantities of floating ice in the Columbia River, commencing on the 12th, seriously impeded navigation, which was not resumed until the 19th, when the ice broke. There was no ice in the Willamette River.

The highest and lowest water, mean stage, and monthly range at 118 river stations are given in the accompanying table. Hydrographs for typical points on seven principal rivers are shown on the Chart. The stations selected for charting are: Keokuk, St. Louis, Cairo, Memphis, and Vicksburg, on the Mississippi; Cincinnati, on the Ohio; Nashville, on the Cumberland; Johnsonville, on the Tennessee; Kansas City, on the Missouri; Little Rock, on the Arkansas; and Shreveport, on the Red.—*H. C. Frankenfield, Forecast Official.*

Heights of rivers referred to zeros of gauges, December, 1898.

Stations.	Distance to mouth of river.	Danger line on gauge.	Highest water.		Lowest water.		Mean stage.	Monthly range.
			Height.	Date.	Height.	Date.		
Mississippi River.	*Miles.*	*Feet.*	*Feet.*		*Feet.*		*Feet.*	*Feet.*
St. Paul, Minn	1,957	14	Frozen					
Reads Landing, Minn	1,887	12	0.4	18, 20, 21 24–27	−0.9	6,8	0.4	1.3
Red Wing, Minn			Frozen					
La Crosse, Wis	1,822	12	Frozen					
North McGregor, Iowa	1,762	18	2.7	26,27	1.5	1	2.1	1.2
Dubuque, Iowa	1,702	15	Frozen					
Leclaire, Iowa	1,612	10	Frozen					
Davenport, Iowa	1,596	15	Frozen					
Galland, Iowa	1,475	8	Frozen					
Keokuk, Iowa	1,466	14	Frozen					
Hannibal, Mo	1,405	17	2.7	25	−0.6	6	1.2	3.3
Grafton, Ill	1,307	23	4.9	25,26	1.9	9,10	3.9	3.0
St. Louis, Mo	1,264	30	9.8	26	0.3	11	4.1	9.5
Chester, Ill	1,189	30	6.4	27,28	−1.0	12	2.5	7.4
Cairo, Ill	1,073	45	23.2	31	10.4	19	14.2	12.8
Memphis, Tenn	843	33	14.6	31	5.8	21,22	8.0	8.8
Helena, Ark	767	42	18.4	31	9.7	23	12.4	8.7
Arkansas City, Ark	635	42	19.5	31	11.2	23	14.0	8.3
Greenville, Miss	595	42	14.8	31	8.9	24	11.5	5.9
Vicksburg, Miss	474	45	16.5	1	9.4	24–26	12.3	7.1
New Orleans, La	108	16	6.2	2,3	3.8	27,28	4.8	2.4
Arkansas River.								
Wichita, Kans	720	10	2.8	20	1.3	17	1.8	1.5
Fort Smith, Ark	345	22	12.2	22	3.9	15–18	6.1	8.3
Dardanelle, Ark	250	21	11.9	24	2.6	17	5.5	9.3
Little Rock, Ark	170	23	13.2	25	3.6	15	6.8	9.6
White River.								
Newport, Ark	150	26	12.7	23	3.5	17,18	6.8	9.2
Des Moines River.								
Des Moines, Iowa	150	19	Frozen					
Illinois River.								
Peoria, Ill	135	14	8.4	1	5.9	20,21	7.0	2.5
Missouri River.								
Bismarck, N. Dak	1,201	14	4.2	20,21	2.8	1	3.5	1.4
Pierre, S. Dak	1,006	14	Frozen					
Sioux City, Iowa	676	19	Frozen					
Omaha, Nebr	561	18	Frozen					
St. Joseph, Mo	373	10	−0.7	31	−3.1	4,8	−1.7	2.4
Kansas City, Mo	280	21	8.1	24	4.0	12	6.1	4.1
Boonville, Mo	191	20	8.2	24	1.7	14	4.3	6.5
Hermann, Mo.‡	95	24	10.0	25	2.1	13	5.6	7.9

Heights of rivers above zeros of gauges—Continued.

Stations.	Distance to mouth of river.	Danger line on gauge.	Highest water.		Lowest water.		Mean stage.	Monthly range.
			Height.	Date.	Height.	Date.		
Ohio River.	*Miles.*	*Feet.*	*Feet.*		*Feet.*		*Feet.*	*Feet.*
Pittsburg, Pa	966	22	15.2	22, 24	2.2	12, 16, 17	5.9	13.0
Davis Island Dam, Pa	960	25	14.6	24	4.1	16	7.3	10.5
Wheeling, W. Va	875	36	22.8	23	4.9	15	9.9	17.9
Parkersburg, W. Va	785	36	23.5	24, 25	7.1	1, 2	9.9	16.4
Point Pleasant, W. Va	703	39	27.0	25, 26	3.9	17	12.1	23.1
Catlettsburg, Ky	651	50	30.4	26	5.5	18	15.1	24.9
Portsmouth, Ohio	612	50	31.3	26	7.0	18	16.1	24.3
Cincinnati, Ohio	499	50	31.9	27	10.3	18	18.4	21.6
Louisville, Ky	367	28	11.8	28	6.3	19	8.4	5.5
Evansville, Ind	184	35	23.9	30	9.3	19, 20	13.9	14.6
Paducah, Ky	47	40	18.7	31	8.5	19	11.3	10.2
Allegheny River.								
Warren, Pa	177	7	6.1	22	0.8	14–19	2.2	5.3
Oil City, Pa	123	13	7.0	23	1.5	10–12	2.9	6.5
Parkers Landing, Pa	73	20	8.8	24	1.3	12	3.1	7.5
Freeport, Pa	26	20	15.0	24	1.7	11	5.9	13.3
Conemaugh River.								
Johnstown, Pa	64	7	3.5	23	1.1	16	2.0	2.4
Red Bank Creek.								
Brookville, Pa	35	8	2.3	23	1.0	2-20,30,31	1.2	1.3
Beaver River.								
Ellwood Junction, Pa	10	14	7.0	21	0.9	3	1.7	6.1
Cumberland River.								
Burnside, Ky	434	50	11.0	6	3.0	18	5.3	8.0
Carthage, Tenn	257	30	8.5	8	3.0	18	5.2	5.5
Nashville, Tenn	175	40	11.6	10	4.9	19	7.9	6.7
Great Kanawha River.								
Charleston, W. Va	61	30	8.9	25	3 7	17, 18	5.8	5.2
New River.								
Hinton, W. Va	95	14	5.1	24	1.5	16	2.8	3.6
Licking River.								
Falmouth, Ky	30	25	8.5	5,6	1.2	1–3	3.7	7.3
Miami River.								
Dayton, Ohio	69	18	7.4	21	1.3	16	2.4	6.1
Monongahela River.								
Weston, W. Va	161	18	3.7	20	0.0	10-15,28-31	0.7	3.7
Fairmont, W. Va	119	25	10.0	21	1.7	31	3.5	8.3
Greensboro, Pa	81	18	15.5	21	7.0	1	9.1	8.5
Lock No. 4, Pa	40	28	19.0	21	7.0	17	9.7	12.0
Cheat River.								
Rowlesburg, W. Va.§	36	14	7.0	20,21	2.0	19	3.7	5.0
Youghtogheny River.								
Confluence, Pa	59	10	5.4	22–24	1.0	11	2.8	4.4
West Newton, Pa.	15	23	7.5	22, 24	0.7	16	2.6	6.8
Muskingum River.								
Zanesville, Ohio	70	20	16.4	22–24	7.7	1, 3, 4	9.8	8.7
Tennessee River.								
Kingston, Tenn	534	25	3.2	6	1.0	17	2.3	2.2
Chattanooga, Tenn	430	33	6.0	7, 22, 23	3.6	18	5.1	2.4
Bridgeport, Ala	390	24	4.4	8	1.9	19	3.3	2.5
Florence, Ala	220	16	4.8	23	2.0	19	3.3	2.8
Johnsonville, Tenn	94	21	7.0	25	3.9	19	5.3	3.1
Clinch River.								
Speers Ferry, Va	156	20	1.5	25	0.2	{2, 3, 8, 12 13, 15, 16}	0.5	1.3
Clinton, Tenn	46	25	7.1	8	4.0	17, 18	5.6	3.1
Wabash River.								
Mount Carmel, Ill.†	50	15	11.2	27	2.4	14	5.3	8.8
Red River.								
Arthur City, Tex	688	27	8.3	21	4.3	16, 17	5.1	4.0
Fulton, Ark	565	28	12.6	24	3.0	16–18	5.2	9.6
Shreveport, La	449	29	7.9	28	1.4	17, 18	3.7	6.5
Alexandria, La	139	33	6.0	31	2.2	19	4.0	3.8
Atchafalaya Bayou.								
Melville, La	100*	31	20.0	1	14.6	27, 28	16.8	5.4
Ouachita River.								
Camden, Ark	340	39	10.1	23	5.7	16–18	7.0	4.4
Monroe, La	100	40	13.6	1, 2	9.8	18	12.1	3.8
Yazoo River.								
Yazoo City, Miss	80	25	4.5	28–31	0.2	11	1.9	4.3
Flint River.								
Albany, Ga	80	20	12.0	11	4.6	19	8.2	7.4
Cape Fear River.								
Fayetteville, N. C	100	38	14.6	7	4.6	20	7.1	10.0
Columbia River.								
Umatilla, Oreg	270	25	2.6	3–6	0.0	29–31	1.4	2.6
The Dalles, Oreg	166	40	2.7	1	−0.8	17, 18	0.7	3.5
Willamette River.								
Albany, Oreg	99	20	14.5	3	3.5	15, 16	6.7	11.0
Portland, Oreg	10	15	8.2	2	2.0	11	4.2	6.2
Edisto River.								
Edisto, S. C	75	6	5.1	6–10	4.2	18, 20	4.7	0.9
James River.								
Lynchburg, Va	257	18	4.2	5,6	1.1	17–20	2.2	3.1
Richmond, Va	110	12	5.9	6	0.5	16	1.5	5.4
Alabama River.								
Montgomery, Ala	265	35	10.8	6	2.7	18, 19	7.1	8.1
Selma, Ala	212	35	13.4	23	5.6	19, 20	9.4	7.8
Coosa River.								
Rome, Ga	225	30	5.0	6	2.4	30, 31	3.2	2.6
Gadsden, Ala	144	18	5.3	21	2.1	19	3.2	3.2
Tombigbee River.								
Columbus, Miss	285	33	3.5	24	−2.2	18	−0.1	5.7
Demopolis, Ala	155	35	19.9	23	2.0	18	8.5	17.9
Black Warrior River.								
Tuscaloosa, Ala	90	38	23.9	21	2.1	18	7.1	21.8
Pedee River.								
Cheraw, S. C	145	27	11.5	7	1.7	17, 18, 20	3.9	9.8
Black River.								
Kingstree, S. C	60	12	10.4	1	8.0	17, 20–23	9.0	2.4
Lumber River.								
Fairbluff, N. C	10	6	5.1	11, 12	4.2	24, 25	4.7	0.9

Heights of rivers above zeros of gauges—Continued.

Stations.	Distance to mouth of river.	Danger line on gauge.	Highest water.		Lowest water.		Mean stage.	Monthly range.
			Height.	Date.	Height.	Date.		
Lynch Creek.	*Miles.*	*Feet.*	*Feet.*		*Feet.*		*Feet.*	*Feet.*
Effingham, S.C.	35	12	9.7	7	6.0	17-19	7.5	3.7
Potomac River.								
Harpers Ferry, W. Va.	170	16	8.8	6	2.3	19,20	3.8	6.5
Roanoke River.								
Clarksville, Va.	155	12	6.7	6	0.9	17	2.2	5.8
Sacramento River.								
Red Bluff, Cal.	241	23	0.6	1	— 0.6	26-31	—0.3	1.2
Sacramento, Cal.	70	25	10.3	1	7.6	13	8.5	2.7
Santee River.								
St. Stephens, S.C.	50	12	7.9	13,14	5.8	22	7.2	2.1
Congaree River.								
Columbia, S.C.	37	15	3.5	6	0.3	18	1.3	3.2
Wateree River.								
Camden, S.C.	45	24	13.1	7	4.4	16	7.3	8.7

Heights of rivers above zeros of gauges—Continued.

Stations.	Distance to mouth of river.	Danger line on gauge.	Highest water.		Lowest water.		Mean stage.	Monthly range.
			Height.	Date.	Height.	Date.		
Savannah River.	*Miles.*	*Feet.*	*Feet.*		*Feet.*		*Feet.*	*Feet.*
Augusta, Ga.	130	32	16.2	5	7.9	17,19	10.0	8.3
Susquehanna River.								
Wilkesbarre, Pa.	178	14	10.5	24	3.0	1-6	4.1	7.5
Harrisburg, Pa.	70	17	7.8	25	1.9	18	3.7	5.9
Juniata River.								
Huntingdon, Pa.	80	24	5.9	23	3.2	4	4.0	2.7
W. Br. of Susquehanna.								
Williamsport, Pa.	35	20	8.3	24	1.3	17	3.0	7.0
Waccamaw River.								
Conway, S.C.	40	7	5.6	13,14	3.7	31	4.9	1.9

* Distance to Gulf of Mexico. † Record for 25 days. ‡ Record for 26 days.
§ Record for 27 days. ‖ Record for 30 days.

THE WEATHER OF THE MONTH.

By A. J. HENRY, Chief of Division of Records and Meteorological Data.

The statistical aspects of the weather of the month are presented in the tables which form the closing part of this REVIEW. Table I, in particular, contains numerous details that are important in the study of climatology. The numerical values in the tables have been generalized in a number of cases, the results appearing on Charts Nos. III to IX, inclusive.

PRESSURE AND WIND.

Normal conditions.—The geographic distribution of normal barometric readings at sea level and under local gravity for December is shown by Chart V of the MONTHLY WEATHER REVIEW for December, 1893.

Normal pressure in December, as in November, is highest over the middle Plateau where it is above 30.20 inches; it is also above 30.20 over eastern Tennessee, the western part of the Carolinas and northern Georgia. Normal pressure in December is lowest over the Gulf of St. Lawrence whence there is a marked gradient toward the permanent area of low pressure on the North Atlantic. Normal pressure is also below 29.95 at Tatoosh Island, Washington, and there is a marked gradient from that place northwestward to the permanent area of low pressure in the North Pacific.

As compared with November, normal pressure increases in all regions except from the middle Plateau to the north Pacific coast.

In December, the prevailing winds on the Atlantic coast are northwesterly or off-shore; in the Gulf States northeasterly or easterly; on the upper Lakes westerly; on the lower Lakes southwesterly; and on the plains east of the Rocky Mountains northwesterly. Elsewhere the winds are more or less variable, no single direction predominating over a considerable stretch of territory.

The current month.—The distribution of mean pressure for the current month is shown on Chart IV. The noteworthy features of the month are (1) the merging of the middle Plateau and South Atlantic highs into one great high, extending from eastern Oregon to Georgia, with a mean pressure of 30.55 inches in southern Idaho; (2) the unusually high pressure that prevailed over the Rocky Mountain and plateau regions.

As compared with November, 1898, mean pressure increased from 0.1 to 0.3 inch from the ninety-fifth meridian westward to the Pacific, the greatest increase being in southern Idaho and western Wyoming. Mean pressure in December decreased slightly in North Carolina and also in the lower Lake region and the St. Lawrence Valley.

Mean pressure was above normal west of a line drawn from Charleston, S. C., to Bismarck, N. Dak. It was below normal in the Lake region, the upper Ohio Valley, the Middle States and New England.

The weather conditions on the Pacific coast were largely dominated by the position and magnitude of the Plateau high.

TEMPERATURE OF THE AIR.

Normal conditions.—The normal temperature of the air in the United States in December varies from about 70° at Key West, 56° at Jacksonville, 55° at New Orleans, 57° at Galveston, 56° at San Diego, to 26° at Eastport, 25° at Burlington, 30° at Buffalo, 29° at Detroit, 18° at Duluth, 6° at St. Vincent, 21° at Havre, 32° at Spokane, and 42° at Seattle, on Puget Sound. The warmest regions are the lower Rio Grande Valley and Florida; the coolest, Minnesota and South Dakota.

In studying the distribution of monthly mean temperatures it will be found very helpful to consult the charts at the end of this REVIEW, especially No. VI, Surface Temperatures, Maximum, Minimum, and Mean. This chart gives a very good idea of the variations of temperature with latitude and longitude, and also of the distribution of normal surface temperatures. Chart VI for any month will differ from a normal chart merely in the displacement or bending of the isotherms northward or southward according as the temperature of the particular locality is above or below the normal for the place and season.

The current month.—The temperature of the month was considerably below normal in all but a very few regions, although the departures on the Atlantic coast and in New England were not large. The greatest deficiencies, 7° to 10° occurred over a large tract of country extending from central Texas northwestward to the State of Washington, and almost coincident with the area of high pressure already noted. Generally from the Mississippi River eastward the departures were less than 5° per day.

The highest maximum temperatures of the month, 80° and over, were registered in Florida, the Lower Rio Grande Valley and southern California. A maximum of 92° was registered at Rio Grande City, Texas. The lowest maximum temperatures of the month 35° to 40°, were observed in portions of Iowa, Wisconsin and Minnesota.